NEW SOURCE CONSTRUCTION PERMIT
and MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR QUALITY

HHI Custom Pelleting Company
South State Road 9
Albion, Indiana 48701

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 113-13651-00003	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a sod nutrient fertilizer manufacturing operation.

Authorized Individual:	Phillip Sensibaugh
Source Address:	South State Road 9, Albion, Indiana 48701
Mailing Address:	3434 South 400 East, Albion, Indiana 48701
Phone Number:	(219) 693-6579
SIC Code:	2875
County Location:	Noble
County Status:	Attainment for all criteria pollutants
Source Status:	Minor Source, under PSD or Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

(a) one (1) raw material receiving system with a maximum design capacity of sixty (60) tons per hour including:

  (i) one (1) raw material receiving pit, identified as P1A, with emissions controlled by baghouse C1 and exhausted through Stack S1,
  (ii) one (1) enclosed raw material conveyor, identified as P1B, and
  (iii) one (1) raw material bucket elevator, identified as P1C.

(b) one (1) bulk storage bin area, identified as P2, with a maximum design raw material throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(c) one (1) batch hopper area, identified as P3, with a maximum design raw material throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(d) one (1) enclosed batch conveyor, identified as P4, with a maximum design raw material throughput of six (6) tons per hour.

(e) one (1) enclosed batch bucket elevator, identified as P5, with a maximum design raw material throughput of six (6) tons per hour.

(f) one (1) enclosed batch screen and clump breaker, identified as P6, with a maximum design raw material throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(g) one (1) enclosed batch bucket elevator, identified as P7, with a maximum design raw material throughput of six (6) tons per hour.

(h) one (1) batch blender, identified as P8, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(i) one (1) batch hopper area with a maximum design product throughput of six (6) tons per hour, including one (1) batch blend hopper, identified as P9 and one (1) batch flush hopper, identified as P9A, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(j) one (1) enclosed batch pelletizer, identified as P10, with a maximum design product throughput of six (6) tons per hour.

(k) one (1) enclosed batch pellet conveyor, identified as P11, with a maximum design product throughput of six (6) tons per hour.

(l) one (1) batch pellet screen, identified as P12, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(m) one (1) fifteen (15) MMBtu/hr natural gas fired batch product pellet dryer, identified as P13, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(n) one (1) batch pellet crumbler, identified as P14, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(o) one (1) enclosed batch pellet conveyor, identified as P15, with a maximum design throughput of six (6) tons per hour.

(p) one (1) enclosed batch final pellet screen, identified as P16, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(q) one (1) batch final pellet crumbler, identified as P17, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(r) one (1) batch scale/bagger/sewer process, identified as P18, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled “Minor Source Operating Permit”, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

(a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.

(1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.

(2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.

(b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.

(d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).

(e) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

(a) The total source potential to emit of all criteria pollutants is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

(b) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAQ prior to making the change.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAQ, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015
Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;

(c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).

(c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.7 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.8 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.9 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), the fugitive particulate matter emissions shall be controlled according to the plan submitted by HHI Custom Pelleting.

All Pursuant to the plan submitted by HHI Custom Pelleting, all fugitive particulate matter (PM) emissions resulting from:

(a) the paved roads and parking lots shall be controlled by vacuum sweeping on an as needed basis.

(b) the unpaved roads and parking lots shall be controlled by treating the surfaces with a suitable and effective oil or chemical dust suppressant that is approved by the Commissioner, and/or by spraying the surfaces with water. The suppressant used shall be applied on an as needed basis.

(c) the material conveyors and bucket elevators shall be controlled by totally enclosing each conveyor on the top and sides.

(d) the transportation of material by truck, front end loaders, or similar vehicles shall be controlled by completely enclosing and/or tarping the applicable vehicles, minimizing the vehicular distance between the transfer points, and maintaining each vehicle body in such a condition that prevents any leaks of material.

(e) the unloading area shall be controlled by partially enclosing the overall unloading area, collecting the emissions from the receiving pit, and exhausting all collected emissions to baghouse C1.

(f) the storage bins and hoppers, crushers, grinders, screening and mixing units, drying oven, and final screen/bagging process shall be controlled by enclosing each emission unit, minimizing the free fall distance between points, and exhausting all emissions collected to baghouse C1.

(g) the hauling and dumping of solid waste (as defined in IC 13-7-1-2(10)) shall be controlled by minimizing the free fall distance from the baghouse and/or process equipment when loading or unloading the collected material and enclosing or covering the material when hauling.

(h) the building openings other than Stack S1, shall be controlled by implementing an in-house operating and procedure maintenance program including the maintenance and operating protocol of baghouse C1 specified in Conditions D.1.2, D.1.4, D.1.5, D.1.6, and D.1.7, and operating and maintaining the process equipment such that visible emissions are minimized.

For the purpose of this Condition, "as needed basis" is defined as the frequency of application necessary to minimize visible particulate matter (PM) emissions.

The fugitive control plan described in this Condition shall commence the date operation of the source commences.

Testing Requirements

C.10 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.11 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this permit;

(3) The Compliance Monitoring Requirements in Section D of this permit;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

Record Keeping and Reporting Requirements

C.14 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.15 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.16 General Record Keeping Requirements [326 IAC 2-6.1-2]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and made available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this permit;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) Records that document all control measures and activities to be implemented in accordance with the approved control plan.

(e) All record keeping requirements not already legally required shall be implemented when operation begins.

C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

(2) A malfunction as described in 326 IAC 1-6-2; or

(3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

(f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

(g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.18 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

(a) one (1) raw material receiving system with a maximum design capacity of sixty (60) tons per hour including:

(i) one (1) raw material receiving pit, identified as P1A, with emissions controlled by baghouse C1 and exhausted through Stack S1,
(ii) one (1) enclosed raw material conveyor, identified as P1B, and
(iii) one (1) raw material bucket elevator, identified as P1C.

(b) one (1) bulk storage bin area, identified as P2, with a maximum design raw material throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.
(c) one (1) batch hopper area, identified as P3, with a maximum design raw material throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.
(d) one (1) enclosed batch conveyor, identified as P4, with a maximum design raw material throughput of six (6) tons per hour.
(e) one (1) enclosed batch bucket elevator, identified as P5, with a maximum design raw material throughput of six (6) tons per hour.
(f) one (1) enclosed batch screen and clump breaker, identified as P6, with a maximum design raw material throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.
(g) one (1) enclosed batch bucket elevator, identified as P7, with a maximum design raw material throughput of six (6) tons per hour.
(h) one (1) batch blender, identified as P8, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.
(i) one (1) batch hopper area with a maximum design product throughput of six (6) tons per hour, including one (1) batch blend hopper, identified as P9 and one (1) batch flush hopper, identified as P9A, with emissions controlled by baghouse C1 and exhausted through Stack S1.
(j) one (1) enclosed batch pelletizer, identified as P10, with a maximum design product throughput of six (6) tons per hour.
(k) one (1) enclosed batch pellet conveyor, identified as P11, with a maximum design product throughput of six (6) tons per hour.
(l) one (1) batch pellet screen, identified as P12, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.
(m) one (1) fifteen (15) MMBtu/hr natural gas fired batch product pellet dryer, identified as P13, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.
(n) one (1) batch pellet crumbler, identified as P14, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.
(o) one (1) enclosed batch pellet conveyor, identified as P15, with a maximum design throughput of six (6) tons per hour.
(p) one (1) enclosed batch final pellet screen, identified as P16, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.
(q) one (1) batch final pellet crumbler, identified as P17, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.
(r) one (1) batch scale/bagger/sewer process, identified as P18, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D1.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the sod nutrient fertilizer manufacturing operation shall not exceed 47.19 pounds per hour when operating at a process weight rate of 132,000 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this emissions unit and its control device.

Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.3 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the particulate matter (PM) limit specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.4 Particulate Matter (PM)

Baghouse C1 for PM control shall be in operation at all times when the sod nutrient fertilizer manufacturing operation is in operation.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.5 Visible Emissions Notations

(a) Daily visible emission notations of the sod nutrient fertilizer manufacturing operation stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the sod nutrient fertilizer manufacturing operation, at least once a week when the sod nutrient fertilizer manufacturing operation is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 3.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.8 Record Keeping Requirements

(a) To document compliance with Condition D.1.5, the Permittee shall maintain records of weekly visible emission notations of the sod nutrient fertilizer manufacturing operation stack exhaust.

(b) To document compliance with Condition D.1.6, the Permittee shall maintain the following:

(1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:

(A) Inlet and outlet differential static pressure; and

(B) Cleaning cycle: frequency and differential pressure.

(2) Documentation of all response steps implemented, per event .

(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

(4) Quality Assurance/Quality Control (QA/QC) procedures.

(5) Operator standard operating procedures (SOP).

(6) Manufacturer's specifications or its equivalent.

(7) Equipment "troubleshooting" contingency plan.

(8) Documentation of the dates vents are redirected.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.9 Reporting Requirements

A semi-annual summary of the information to document compliance with Condition D.1.5 and D.1.6 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six month period being reported.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	HHI Custom Pelleting Company
Address:	3434 South State Road 9
City:	Albion, Indiana 48701
Phone #:	(219) 693 - 6579
MSOP #:	113-13651-00003

I hereby certify that HHI Custom Pelleting is
- **9** still in operation.
- **9** no longer in operation.

I hereby certify that HHI Custom Pelleting is
- **9** in compliance with the requirements of MSOP 113-13651-00003.
- **9** not in compliance with the requirements of MSOP 113-13651-00003.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:_____PHONE NO. ( )_____
LOCATION: (CITY AND COUNTY)_____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____
_____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 19____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:
_____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 19____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____

_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____ _____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_____

MALFUNCTION REPORTED BY:_____TITLE:_____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____

_____

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Minor Source Operating Permit (MSOP)

Source Background and Description

Source Name: HHI Custom Pelleting Company
Source Location: 3434 South 400 East, Albion, Indiana 48701
County: Noble
SIC Code: 2875
Operation Permit No.: F113-13651-00003
Permit Reviewer: SDF

The Office of Air Quality (OAQ) has reviewed a MSOP application from HHI Custom Pelleting Company relating to the operation of a sod nutrient fertilizer manufacturing operation including:

(a) one (1) raw material receiving system with a maximum design capacity of sixty (60) tons per hour including:

  (i) one (1) raw material receiving pit, identified as P1A, with emissions controlled by baghouse C1 and exhausted through Stack S1,
  (ii) one (1) enclosed raw material conveyor, identified as P1B, and
  (iii) one (1) raw material bucket elevator, identified as P1C.

(b) one (1) bulk storage bin area, identified as P2, with a maximum design raw material throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(c) one (1) batch hopper area, identified as P3, with a maximum design raw material throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(d) one (1) enclosed batch conveyor, identified as P4, with a maximum design raw material throughput of six (6) tons per hour.

(e) one (1) enclosed batch bucket elevator, identified as P5, with a maximum design raw material throughput of six (6) tons per hour.

(f) one (1) enclosed batch screen and clump breaker, identified as P6, with a maximum design raw material throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(g) one (1) enclosed batch bucket elevator, identified as P7, with a maximum design raw material throughput of six (6) tons per hour.

(h) one (1) batch blender, identified as P8, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(i) one (1) batch hopper area with a maximum design product throughput of six (6) tons per hour, including one (1) batch blend hopper, identified as P9 and one (1) batch flush hopper, identified as P9A, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(j) one (1) enclosed batch pelletizer, identified as P10, with a maximum design product throughput of six (6) tons per hour.

(k) one (1) enclosed batch pellet conveyor, identified as P11, with a maximum design product throughput of six (6) tons per hour.

(l) one (1) batch pellet screen, identified as P12, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(m) one (1) fifteen (15) MMBtu/hr natural gas fired batch product pellet dryer, identified as P13, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(n) one (1) batch pellet crumbler, identified as P14, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(o) one (1) enclosed batch pellet conveyor, identified as P15, with a maximum design throughput of six (6) tons per hour.

(p) one (1) enclosed batch final pellet screen, identified as P16, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(q) one (1) batch final pellet crumbler, identified as P17, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

(r) one (1) batch scale/bagger/sewer process, identified as P18, with a maximum design product throughput of six (6) tons per hour, with emissions controlled by baghouse C1 and exhausted through Stack S1.

Permitted Emission Units and Pollution Control Equipment

The proposed source is a new source. Thus, there are no permitted emission units and/or pollution control equipment at this proposed source.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) four (4) 0.25 MMBtu/hr natural gas fired space heaters.

(b) Propane or liquified petroleum gas, or butane-fired combustion sources with heat input equal to or less than 6 MMBtu/hr.
(c) Combustion source flame safety purging on startup.
(d) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
(e) Heat exchanger cleaning and repair.
(f) Process vessel degassing and cleaning to prepare for internal repairs.
(g) Paved and unpaved roads and parking lots with public access.
(h) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
(i) Purge double block and bleed valves.

Existing Approvals

This source is a proposed new source. Thus, there are no existing approvals at this source.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the MSOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete MSOP application for the purposes of this review was received on December 19, 2000.

Emission Calculations

HHI Custom Pelleting utilizes ingredients normally used to supply animal feed nutrients such as grain processing products and byproducts, minerals, pellet binder, etc. that are equivalent to the materials utilized in grain processing operations. In addition, this proposed source will install and operate equipment similar to grain processing operations such as a truck bulk receiving pit, enclosed conveyors, a batch weigher and mixer, a pelletizer, and a pellet dryer/cooler. Therefore, the emission factors used to determine the potential to emit (PTE) were derived from AP-42, Section 9.9.1, Grain Elevators and Processes.

POTENTIAL TO EMIT (PTE):

The following calculations determine the potential to emit of the proposed source:

Truck Bulk Receiving Process (P1):

The PTE is determined based on PM and PM10 emission factors of 0.017 lb/ton and 0.0025 lb/ton, respectively (SCC 3-02-008-02), emissions before controls, a maximum capacity of 60 tons per hour, and 8,760 hours per year.

PM: 60 tons/hr * 8760 hr/yr * 0.017 lb PM/ton * 1/2000 ton PM/lb PM = 4.47 tons/yr
PM10: 60 tons/hr * 8760 hr/yr * 0.0025 lb PM10/ton * 1/2000 ton PM10/lb PM10 = 0.66 tons/yr

Note: The PM/PM10 emissions from conveyor (P1B) and bucket elevator (P1C) are completely enclosed. The emissions from these conveyors are determined to be negligible.

Bulk Storage Area (P2), Batch Hopper Area (P3), Blender Inlet (P8), Blender Hopper (P9), Flush Hopper (P9A), Bagger (P18):

The PTE is determined based on PM and PM10 emission factors of 0.061 lb/ton and 0.034 lb/ton respectively (SCC 3-02-005-30), emissions before controls, a maximum capacity of 6 tons per hour, and 8,760 hours per year.

Note: The AP-42 emission factors are estimated for all operations combined. However, to ensure that all emissions from these units are accounted for, the following calculations are estimated using the respective emission factors for each unit or process.

PM: 6 tons/hr * 8760 hr/yr * 0.061 lb PM/ton * 1/2000 ton PM/lb PM * 6 = 9.62 tons/yr
PM10: 6 tons/hr * 8760 hr/yr * 0.034 lb PM10/ton * 1/2000 ton PM10/lb PM10 * 6 = 5.36 tons/yr

Note: The PM/PM10 emissions from conveyor (P4) and bucket elevators P5 and P7 are completely enclosed. The emissions from these conveyors are determined to be negligible.

Batch Screen and Clump Breaker (P6), Pellet Screen (P12), and Final Pellet Screen (P16):

The PTE is determined based on PM and PM10 emission factors of 0.75 lb/ton and 0.38 lb/ton respectively (SCC 3-02-005-37), emissions before controls, a maximum capacity of 6 tons per hour, and 8,760 hours per year.

PM: 6 tons/hr * 8760 hr/yr * 0.75 lb PM/ton * 1/2000 ton PM/lb PM * 3 = 59.13 tons/yr
PM10: 6 tons/hr * 8760 hr/yr * 0.38 lb PM10/ton * 1/2000 ton PM10/lb PM10 * 3 = 29.96 tons/yr

Note: The PM/PM10 emissions from pelletizer (P10) and conveyor (P11) are completely enclosed. The emissions from these conveyors are determined to be negligible.

Pellet Dryer/Cooler (P13):

Process Emissions:

The PM/PM10 PTE is determined based on PM and PM10 emission factors of 3.6 lb/ton and 1.8 lb/ton respectively (SCC 3-02-008-16), emissions before controls, a maximum capacity of 6 tons per hour, and 8,760 hours per year.

PM: 6 tons/hr * 8760 hr/yr * 3.6 lb PM/ton * 1/2000 ton PM/lb PM = 94.60 tons/yr
PM10: 6 tons/hr * 8760 hr/yr * 1.8 lb PM10/ton * 1/2000 ton PM10/lb PM10 = 47.30 tons/yr

Dryer Combustion Emissions:

The combustion PTE is determined based on AP-42 emission factors (Table 1.4-1), a maximum capacity of 15 MMBtu/hr, 8,760 hours/yr, and emissions before controls.

MMcf/yr = MMBtu/hr * 8760 hr/yr * 1/1000 MMcf/MMBtu

ton poll./yr = MMcf/yr * Ef (lb poll./MMcf) * 1/2000 ton poll./lb. poll.

	PM 1.9 lb/MMcf	PM10 7.6 lb/MMcf	SO2 0.6 lb/MMcf	NOx 100 lb/MMcf	VOC 5.5 lb/MMcf	CO 84 lb/MMcf
ton/yr	0.10	0.50	neg.	6.6	0.40	5.50

Pellet Crumbler (P14), Pellet Crumbler (P17):

The PM/PM10 PTE is determined based on PM and PM10 emission factors of 0.24 lb/ton and 0.12 lb/ton respectively (SCC 3-02-008-19), emissions before controls, a maximum capacity of 6 tons per hour, and 8,760 hours per year.

PM: 6 tons/hr * 8760 hr/yr * 0.24 lb PM/ton * 1/2000 ton PM/lb PM * 2 = 12.61 tons/yr
PM10: 6 tons/hr * 8760 hr/yr * 0.12 lb PM10/ton * 1/2000 ton PM10/lb PM10 * 2 = 6.32 tons/yr

Note: The PM/PM10 emissions from conveyor (P15) is completely enclosed. The emissions from this conveyor is determined to be negligible.

Insignificant Activity Emissions:

The insignificant activities that have measurable emissions are the four (4) 0.25 MMBtu/hr space heaters and the fugitive emissions from the unpaved roads.

Space Heaters:

The PTE from the space heaters are determined based on a combined maximum capacity of 1.0 MMBtu/hr, AP-42 emission factors (Table 1.4-1), 8,760 hours/yr, and emissions before controls.

MMcf/yr = MMBtu/hr * 8760 hr/yr * 1/1000 MMcf/MMBtu
ton poll./yr = MMcf/yr * Ef (lb poll./MMcf) * 1/2000 ton poll./lb. poll.

	PM 1.9 lb/MMcf	PM10 7.6 lb/MMcf	SO2 0.6 lb/MMcf	NOx 100 lb/MMcf	VOC 5.5 lb/MMcf	CO 84 lb/MMcf
ton/yr	neg.	neg.	neg.	neg.	neg.	neg.

Unpaved Roads:

The PM/PM10 emissions from the unpaved roads are determined based on AP-42 emission factors (Section 13.2.2), emissions before controls, 8,760 hours of operation, and the following information:

		Paved (Miles)	Unpaved (Miles)	Total (Miles)
Full	30	0	0.25	0.25
Empty	10	0	0.25	0.25
Total Miles		0	0.50	0.50

E = k * [s/12]^a * [W/3]^b / [M/0.2]^c * [(365 - p)/365] = lb/vehicle mile traveled

PM PTE:

where:

k = 10 particle size multiplier for PM30
s = 6.4 % mean silt content for publically accessible roads
a = 0.8 for PM30
W = 20 (Tons) mean weight (based on distance traveled full and empty)
b = 0.5 for PM30
M = 0.2 % surface material moisture content
c = 0.4 for PM30
p = 130 mean number of days per year with at least 0.01" precipitation

E = 10.05 lb/vehicle mile traveled (VMT)
VMT = distance one way trip * number of one way trips/hr * 8760 hr/yr
= 0.25 miles/trip * 0.46 trip/hr * 8760 hr/yr
= 1007.4 VMT/yr

Fugitive PM/PM10 PTE (tons/yr) = 1007.4 VMT/yr * 10.05 lb/VMT * 1/2000 ton/lb = 5.06 ton/yr

PM10 PTE:

k = 2.6 particle size multiplier for PM30
s = 6.4 % mean silt content for publically accessible roads
a = 0.8 for PM10
W = 20 (Tons) mean weight (based on distance traveled full and empty)
b = 0.4 for PM10
M = 0.2 % surface material moisture content
c = 0.3 for PM10
p = 130 mean number of days per year with at least 0.01" precipitation

E = 2.16 lb/vehicle mile traveled (VMT)
VMT = distance one way trip * number of one way trips/hr * 8760 hr/yr
= 0.25 miles/trip * 0.46 trip/hr * 8760 hr/yr
= 1007.4 VMT/yr

Fugitive PM/PM10 PTE (tons/yr) = 1007.4 VMT/yr * 2.16 lb/VMT * 1/2000 ton/lb = 1.09 ton/yr

The following table summarizes the source PTE:

	PM ton/yr	PM10 ton/yr	SO2 ton/yr	NOx ton/yr	VOC ton/yr	CO ton/yr
P1A, P2, P3, P6, P8, P9, P9A, P12, P13, P14, P16, P17, P18	180.43	89.60	-	-	-	-
P13 Combustion	0.10	0.50	neg.	6.60	0.40	5.50
Fugitive from Unpaved Roads	5.06	1.09	-	-	-	-
Space Heater Combustion	neg.	neg.	neg.	neg.	neg.	neg.
Total	**184.59**	**91.19**	**neg.**	**6.60**	**0.40**	**5.50**

POTENTIAL EMISSIONS AFTER CONTROLS:

The PM/PM10 emissions from units P1A, P2, P3, P6, P8, P9, P9A, P12, P13, P14, P16, P17, and P18 are controlled by baghouse C1. The PM/PM10 emissions after controls from these units are determined based on the design outlet grain loading of 0.005 gr/dscf, air flow rate of 25,000 dscfm, 7000 gr/lb, and 8,760 hours/yr.

0.005 gr/dscf * 25000 dscf/min * 60 min/hr * 8760 hr/yr * 1/7000 lb/gr * 1/2000 ton/lb = 4.69 ton/yr*

* PM10 is determined to be 90% of PM in this case, or 4.22 ton/yr.

The fugitive PM/PM10 emissions from the unpaved roads shall be controlled by applying water or chemicals to reduce dust. The percent reduction is determined to be 75%.

PM: 5.06 ton PM/yr * (1 - 0.75) = 1.27 ton PM/yr
PM10: 1.09 ton PM10/yr * (1 - 0.75) = 0.27 ton PM10/yr

The combustion emissions from unit P13 and the space heaters are uncontrolled. Thus, the emissions after controls from these points are equal to the emissions before controls.

The following table summarizes the potential emissions after controls.

	PM ton/yr	PM10 ton/yr	SO2 ton/yr	NOx ton/yr	VOC ton/yr	CO ton/yr
P1A, P2, P3, P6, P8, P9, P9A, P12, P13, P14, P16, P17, P18	4.69	4.22	-	-	-	-
P13 Combustion	0.10	0.50	neg.	6.60	0.40	5.50
Fugitive from Unpaved Roads	1.27	0.27	-	-	-	-
Space Heater Combustion	neg.	neg.	neg.	neg.	neg.	neg.
Total	**6.06**	**4.99**	**neg.**	**6.60**	**0.40**	**5.50**

Potential To Emit for the Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	184.59
PM-10	91.19
SO_2	neg.
VOC	0.40
CO	5.50
NO_x	6.6

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of all criteria pollutants and PM10 are less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7 or 326 IAC 2-8.

(c) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of particulate matter (PM) and PM10 are greater than 25 tons per year and less than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1.

County Attainment Status

The source is located in Noble County.

Pollutant	Status
PM-10	attainment/unclassifiable
SO_2	attainment/unclassifiable
NO_2	attainment/unclassifiable
Ozone	attainment/unclassifiable
CO	attainment/unclassifiable
Lead	attainment/unclassifiable

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Noble County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Noble County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

New Source PSD, Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Potential To Emit (tons/year)
PM	6.06
SO_2	neg.
VOC	0.40
CO	5.50
NO_x	6.6

(a) This new source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

Fugitive Emissions:

(b) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Federal Rule Applicability

(a) 40 CFR 60. Subpart DD, Standards of Performance for Grain Elevators:

40 CFR 60. Subpart DD, Standards of Performance for Grain Elevators does not apply to the proposed source because the fertilizer manufacturing operation does not have any grain storage elevators or grain terminal elevators as defined in 60.301(c) and (d).

(b) 40 CFR 60, Subpart T, Standards of Performance for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants:

40 CFR 60, Subpart T, Standards of Performance for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants does not apply to this source because the proposed fertilizer manufacturing operation is not a wet-process phosphoric acid plant as defined in 60.201(a).

(c) 40 CFR 60, Subpart U, Standards of Performance for the Phosphate Fertilizer Industry: Superphosphoric Acid Plants:

40 CFR 60, Subpart U, Standards of Performance for the Phosphate Fertilizer Industry: Superphosphoric Acid Plants does not apply to this source because the proposed fertilizer manufacturing operation is not a superphosphoric acid plant as defined in 60.211(a).

(d) 40 CFR 60, Subpart V, Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants:

40 CFR 60, Subpart V, Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants does not apply to this source because the proposed source is not a granular diammonium phosphate plant as defined in 60.221(a).

(e) 40 CFR 60, Subpart W, Standards of Performance for the Phosphate Industry: Triple Superphosphate Plants:

40 CFR 60, Subpart W, Standards of Performance for the Phosphate Industry: Triple Superphosphate Plants does not apply to this source because the proposed source is not a Triple Superphosphate Plant as defined in 60.231(a).

(f) 40 CFR 63, Subpart AA, National Emission Standards for Hazardous Air Pollutants from Phosphoric Acid Manufacturing Plants:

40 CFR 63, Subpart AA, National Emission Standards for Hazardous Air Pollutants from Phosphoric Acid Manufacturing Plants does not apply to this source because the proposed source is not a phosphoric acid manufacturing plant as defined in 63.600.

(g) 40 CFR 63, Subpart BB, National Emission Standards for Hazardous Air Pollutants from Phosphate Fertilizer Production Plants:

40 CFR 63, Subpart BB, National Emission Standards for Hazardous Air Pollutants from Phosphate Fertilizer Production Plants does not apply to this source because the proposed source is not a phosphate fertilizer production plant as defined in 63.620.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Noble County and the potential to emit of PM10, SO2, NOx, VOC, and CO after controls, each, are less than the applicable level of 100 tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Visible Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions)

Pursuant to 326 IAC 6-4, the Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

326 IAC 6-5 Fugitive Particulate Matter Emission Limitations

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), the fugitive particulate matter emissions from this source shall be controlled according to the plan submitted by HHI Custom Pelleting.

Pursuant to the plan submitted by HHI Custom Pelleting, all fugitive particulate matter (PM) emissions resulting from:

(a) the paved roads and parking lots shall be controlled by vacuum sweeping on an as needed basis.

(b) the unpaved roads and parking lots shall be controlled by treating the surfaces with a suitable and effective oil or chemical dust suppressant that is approved by the Commissioner, and/or by spraying the surfaces with water. The suppressant used shall be applied on an as needed basis.

(c) the material conveyors and bucket elevators shall be controlled by totally enclosing each conveyor on the top and sides.

(d) the transportation of material by truck, front end loaders, or similar vehicles shall be controlled by completely enclosing and/or tarping the applicable vehicles, minimizing the vehicular distance between the transfer points, and maintaining each vehicle body in such a condition that prevents any leaks of material.

(e) the unloading area shall be controlled by partially enclosing the overall unloading area, collecting the emissions from the receiving pit, and exhausting all collected emissions to baghouse C1.

(f) the storage bins and hoppers, crushers, grinders, screening and mixing units, drying oven, and final screen/bagging process shall be controlled by enclosing each emission unit, minimizing the free fall distance between points, and exhausting all emissions collected to baghouse C1.

(g) the hauling and dumping of solid waste (as defined in IC 13-7-1-2(10)) shall be controlled by minimizing the free fall distance from the baghouse and/or process equipment when loading or unloading the collected material and enclosing or covering the material when hauling.

(h) the building openings other than Stack S1, shall be controlled by implementing an in-house operating and procedure maintenance program including the maintenance and operating protocol of baghouse C1 specified in Conditions D.1.2, D.1.4, D.1.5, D.1.6, and D.1.7, and operating and maintaining the process equipment such that visible emissions are minimized.

For the purpose of this Condition, “as needed basis” is defined as the frequency of application necessary to minimize visible particulate matter (PM) emissions.

The fugitive control plan described in this Condition shall commence the date operation of the source commences. Records shall be kept and maintained which document all control measures and activities to be implemented in accordance with the approved control plan. Said records shall be available upon request of the Commissioner and shall be retained for three (3) years.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The processes of this source will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the sod nutrient fertilizer manufacturing operation, excluding the fugitive emissions from the unpaved roads, for a process weight rate of 132,000 lb/hr (66 ton/hr), shall be 47.19 lb/hr.

E = 55.0 * (66 ton/hr)^0.11 - 40 = 47.19 lb PM/hr

47.19 lb PM/hr * 8760 hr/yr * 1/2000 ton/lb = 206.69 ton PM/yr.

The above PM limit of 47.19 lb/hr (206.69 ton/yr) does not exceed the PSD applicable limit of 250 tons per year. Thus, the hourly PM emission limit does not violate 326 IAC 2-2.

178.99 ton/yr * 1/8760 yr/hr * 2000 lb/ton = 40.86 lb PM/hr.

The estimated hourly PM emissions before controls from the sod nutrient fertilizer manufacturing operation (40.86 lb/hr) are less than the allowable PM rate of 47.19 lb/hr. Thus, compliance is determined to be achieved without control.

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0 P^{0.11} - 40$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Testing Requirements

Stack testing is not required for baghouse C1 because:

(a) there are no applicable NSPS or NESHAPs,
(b) 326 IAC 6-1 does not apply,
(c) there are no emission units with potential to emit (PTE) greater than 40 tons per year that are using the control device to achieve compliance with any limitations,
(d) the baghouse is not being used to satisfy a synthetic minor limit,
(e) there are no unapproved alternate emission factors being used, and
(f) there are no emission units that are non-compliant.

The above determination is based on Office of Air Quality (OAQ) guidance for new source construction, January 1, 1999.

Compliance Monitoring:

Pursuant to the Office of Air Quality (OAQ) guidance for compliance monitoring of major and minor source operating permits, May 14, 1996, compliance monitoring plans shall be required if an operation with its emissions exhausted to a control device, have allowable particulate matter (PM) emissions that exceed 10 lb/hr.

The sod nutrient fertilizer manufacturing operation is controlled by baghouse C1 and has allowable PM emissions of 47.19 lb/hr which exceeds the guidance applicable level of 10 lb/hr. Thus, compliance monitoring shall be required.

Conclusion

The operation of this sod nutrient fertilizer manufacturing operation shall be subject to the conditions of the attached proposed (MSOP No.: 113-13651-00003).